Amendments to the Claims:

This listing of claims replaces all prior listings, and versions, of claims in the present application.

Listing of Claims:

1. (Currently amended) ~~A communication system in which~~ Apparatus for a first communication station ~~communicates~~ to which data is communicated ~~to at least a second communication station~~, the data including a first data-type portion communicated upon a first channel and ~~at least a second~~ a MAC (Medium Access Control) data-type portion communicated upon ~~at least a second~~ a MAC data channel, said ~~communication system characterized by~~ apparatus for estimating a channel phase characteristic associated with the first channel and the MAC data channel ~~and at least second channels~~, said apparatus comprising:

a first data type operator coupled to receive indications of the first data-type portion sent to the ~~second~~ first communication station upon the first channel, said first data-type operator for operating upon the first data-type to form a representation of the first-type data portion subsequent to communication upon the first channel;

a ~~second~~ MAC data-type operator coupled to receive indications of the ~~second~~ MAC data-type portion sent to the ~~second~~ first communication station upon the ~~second~~ MAC data channel, said ~~second~~ MAC data-type operator for operating upon the ~~second~~ MAC data-type portion to strip informational content out of the MAC data-type portion, thereafter to form a representation of the ~~second type~~ MAC data portion subsequent to communication upon the ~~second~~ MAC data channel; and

a channel phase estimator coupled to said first data-type operator to receive the representations of the first data-type portion and coupled to said ~~second~~ MAC data-type operator to receive the representation of the ~~second~~ MAC data-type portion, said channel phase estimator for estimating the channel phase responsive to values of the representations ~~of~~ formed by both of said first data type operator and of said second data-type operator ~~the first and second data-type~~

~~portions, respectively~~.

2. (Currently amended) The apparatus of claim 1 wherein the communication system comprises a radio communication system which defines a pilot channel ~~and a MAC (Medium Access Control) channel~~, the pilot channel forming the first channel ~~and the MAC channel forming the second channel~~, the first data-type data portion formed of a pilot ~~seignal~~ signal ~~and the second data-type data portion formed of MAC data~~, and wherein the channel phase estimated by said channel phase estimator is responsive to values of representations of both of the pilot signal and of the ~~MAC data~~ MAC data-type portion subsequent to stripping of the informational content out of the MAC data.

3. (Original) The apparatus of claim 2 wherein said first data-type operator further comprises a pilot-signal weighter for weighting the indications of the pilot signal by a first selected weighting factor, the indications of the pilot signal, once weighted, forming the representations of the pilot signal.

4. (Currently amended) The apparatus of claim 3 wherein the ~~second~~ MAC data-type operator further comprises a MAC-data weighter for weighting the indications of the ~~MAC data~~ MAC data-type portion by a second selected weighting factor, the indications of the ~~MAC data~~ MAC data-type portion, once weighted, forming the representation of the MAC-data type portion.

5. (Currently amended) The apparatus of claim 4 further comprising a selector coupled to said pilot-signal weighter and to said MAC-data weighter, said selector for selecting the first and second weighting factors, respectively, by which indications of the pilot signal and of the MAC-data type portion are weighted, respectively.

6. (Original) The apparatus of claim 5 wherein selection by said selector of the first and second weighting factors is made according to a selected selection criteria; the selected selection criteria for maximizing a value of the estimated phase estimated by said estimator.

7. (Currently amended) The apparatus of claim 1 wherein the first communication station forms part of ~~communication system comprises~~ a cellular communication system operable pursuant to an IS-95 (Interim Standard – 1995) communication standard in which 1xEV-DO technology is deployed, wherein the first data-type portion communicated upon the first channel comprises a pilot signal communicated upon a time slot defining a pilot channel, wherein the ~~second~~ MAC data-type portion communicated upon the second channel comprises MAC-data signal communicated upon a ~~MACdata~~ the MAC-data channel and wherein the channel phase estimated by said channel phase estimator is formed responsive to values of the pilot signal and to values of the MAC-data signal.

8-9. (Cancelled).

10. (Currently amended) The apparatus of claim ~~9~~ 7 wherein the first communication station comprises a first mobile station, the cellular communication system further comprising a plurality of additional mobile stations ~~network station; wherein the communication system further comprises a plurality of second communication stations, each of the second communication stations comprising a mobile station~~, and wherein the MAC-data signal contains a plurality of MAC-data ~~signal~~ type portions sent to ~~a correspondingly~~ the first mobile station and to the plurality of the additional mobile stations, and wherein the channel phase estimate formed by said channel phase estimator is formed responsive to ~~more than one~~ the plurality of the MAC-data ~~signal~~ type portions, free of the informational content or the MAC data-type portions ~~values of the MAC data~~.

11. (Currently amended) The apparatus of claim 10 wherein said ~~second~~ MAC data-type operator operates to ~~remove the MAC data~~ strip the informational content out of each of the MAC-data ~~signal~~ type portions of the MAC-data signal ~~of the more than one MAC data signal portions~~.

12. (Currently amended) The apparatus of claim 11 wherein the representations of the MAC-data ~~signal~~ type portions generated by said ~~second~~ MAC data-type operator are representative of a combined total of channel estimates responsive to communication of each of ~~the more than one~~ plurality MAC-data ~~signal~~ type portions.

13. (Currently amended) ~~In a~~ A ~~method of communicating in a communication system in which~~ for a first communication station to which data is communicated ~~communicates data to at least a second communication station~~, the data including a first data-type portion communicated upon a first channel and ~~at least a second~~ MAC data-type portion upon ~~at least a second~~ a MAC channel, ~~an improvement of a~~ said method for estimating a channel phase characteristic associated with the first and at least second channels, said method comprising the operations of:

operating upon indications of the first data-type portion sent to the second communication station upon the first channel, thereby to form a representation of the first-type data portion subsequent to communication upon the first channel;

operating upon indications of the MAC ~~second~~ data-type portion sent to the ~~second~~ first communication station upon the ~~second~~ MAC data channel~~,~~ to strip informational content out of the MAC data-type portion thereafter ~~thereby~~ to form a representation of the ~~second type~~ MAC data portion subsequent to communication upon the ~~second~~ MAC data channel; and

estimating the channel phase responsive to values of the representations ~~of~~ formed during both of the operations of operating ~~first data type portion and the second data type portion~~.

14. (Currently amended) The method of claim 13 wherein the communication system comprises a radio communication system which defines a pilot channel ~~and a MAC (Medium Access Control) channel~~, the pilot channel forming the first channel ~~and the MAC channel forming the second channel~~, the first data-type portion formed of a pilot signal ~~and the second data-type data portion formed of the MAC data~~, and wherein the channel phase estimate formed during said operation estimating is formed responsive to representations of both the pilot signal and the ~~MAC data~~ MAC data portion.

15. (Original) The method of claim 14 wherein said operation of operating upon the indications of the first data-type portion further comprises the operation of weighting the indications of the pilot signal by a first selected weighting factor, the indications of the pilot signal, once weighted, forming the representation of the pilot signal.

16. (Currently amended) The method of claim 15 wherein said operation of operating upon the indications of the ~~second~~ MAC data-type portion further comprises the operation of weighting the indications of the ~~MAC data~~ MAC data-type portion by a second selected weighting factor, the indications of the ~~MAC data signal~~ MAC data-type portion, once weighted, forming the representation of the pilot signal.

17. (Currently amended) The method of claim 16 further comprising the operation of selecting the first and second weighting factors, respectively, by which the indications of the pilot signal and of the ~~MAC data~~ MAC data-type portion are weighted, respectively.

18. (Currently amended) The method of claim 13 wherein the first communication station forms part of ~~communication system comprises~~ a cellular communication system operable pursuant to an IS-95 (Interim Standard – 1995) communication standard in which 1xEV-DO technology is deployed, wherein the first data-type portion communicated upon the first channel comprises a pilot signal communicated during a time slot defining a pilot channel,

wherein the ~~second~~ MAC data-type portion communicated upon the ~~second~~ MAC-data channel comprises ~~a~~ the MAC-data signal communicated upon a MAC-data channel and wherein the channel phase estimate generated during said operation of estimating is formed responsive to values of the pilot signal and to values of the MAC-data signal.

19. (Currently amended) The method of claim 18 wherein the representations of the MAC-data signal generated during said operation of operating upon the ~~second~~ MAC data-type is free of values of the MAC-data.

20. (Currently amended) The method of claim 19 wherein the first communication station comprises a first mobile station, the cellular communication system further comprising plurality of additional mobile stations ~~a network station, wherein the communication system further comprises a plurality of second communication stations, each of the second communication stations comprising a mobile station~~, and wherein the MAC-data signal comprises a plurality of MAC-data ~~signal~~ type portions sent to ~~a corresponding~~ the first mobile station and to the plurality of the additional mobile stations, and wherein the channel phase estimate formed during said operation of estimating is formed responsive to ~~more than one~~ the plurality of the MAC-data ~~signal~~ type portions free of the informational content of the MAC data-type portions ~~values of the MAC data~~.